

Chemours GenX Enforcement Briefing Paper

Background

In 2009, in response to a pre-manufacture notice (PMN) submitted by DuPont Company¹ (DuPont) for GenX, EPA's Office of Chemical Safety and Pollution Prevention (OCSPP) issued a Toxic Substances Control Act (TSCA) Section 5(e) Consent Order to DuPont (now Chemours, since July 2015) that allows the company to produce GenX (an ammonium salt) and a GenX precursor chemical (a free acid), subject to certain requirements. These requirements include limitations on releases to the environment, worker safety protections, recordkeeping, and submission of certain studies. Chemours manufactures GenX as a substitute for perfluorooctanoic acid (PFOA). PFOA was the subject of extensive EPA enforcement action at the Parkersburg, WV facility, which was a major use site for PFOA and is now a primary use site for GenX. Chemours produces GenX at the Fayetteville Works Facility in Fayetteville, NC on the Cape Fear River, about 68 miles upstream from Wilmington, NC. GenX was formed in the Cape Fear River from discharges from processes at this facility and has been found drinking water systems in New Hanover (which encompasses Wilmington) and Brunswick Counties. According to Chemours, the chemical that forms into GenX has been released into the Cape Fear River since 1980.

The North Carolina Department of Environment and Natural Resources (now the North Carolina Department of Environmental Quality (NC DEQ)) issued, as authorized under the Clean Water Act (CWA), National Pollutant Discharge Elimination System (NPDES) Permit NC0003575 to DuPont on February 6, 2012. Chemours timely filed for renewal of the five-year permit on May 3, 2016. NC DEQ has not issued a renewed permit; the 2012 NPDES permit remains in force. The 2012 NPDES permit—and the April 29, 2011 NPDES permit application that sought it—does not mention GenX pollutants by name, CAS numbers, or chemical compounds. NC DEQ has stated that it was unaware of the discharge of GenX. Therefore, NPDES Permit NC0003575 does not put limits on GenX pollutants.²

In June 2017, Chemours told North Carolina officials that it had stopped discharging GenX precursors into the Cape Fear River from the Fayetteville Works Facility. On July 14, in response to concerns about the potential health effects of GenX, the North Carolina Department of Health and Human Services (NC DHHS) updated its risk assessment for the chemical, establishing a drinking water health goal of 140 parts per trillion (ppt, also expressed as ng/L). The State's health goal was expressly provisional, based on evolving toxicological information and subject to revision.

Despite Chemours' commitment (and agreement via North Carolina state court partial consent order, *see below*) to stop releases of GenX into the Cape Fear River, subsequent

¹ In October 2015, DuPont separated its Performance Chemicals segment, which includes its titanium technologies, fluoroproducts, and chemical solutions businesses, from the other businesses of DuPont. This separation was effected by a distribution of Chemours common stock on a pro rata basis to DuPont stockholders. This created a new, independent, publicly traded company named The Chemours Company (Chemours).

² In 2012, the West Virginia Department of Environmental Protection authorized the discharge of GenX from Chemours' Washington Works Facility (in a consent order process outside of its NPDES permit renewal), citing the 2009 TSCA 5(e) order and setting discharge limits for the "New Compound" (i.e., GenX).

groundwater and surface water sampling has identified levels of GenX above the state's provisional health goal since June. For example, on September 6, Region 4 received sampling results from NC DEQ showing concentrations of GenX in groundwater onsite at the Fayetteville Works Facility at levels as high as 61,300 ppt. Nearly all groundwater samples in these results drastically exceeded 140 ppt for GenX. Additionally, releases on October 6 and around November 14 have resulted in releases of GenX to the Cape Fear River, from a valve failure and a condensation tower leak, respectively. Chemours estimated that the November 14 leak resulted in a release of 55 pounds of GenX and 70 pounds of the GenX precursor chemical over the course of thirteen hours.

EPA Actions

At the request of NC DEQ, EPA's Office of Research and Development (ORD) performed independent analysis for GenX, providing laboratory reports for five rounds of water samples over the course of five weeks. NC DEQ collected the samples for analysis at thirteen locations in the Cape Fear River. EPA has provided additional reports beyond the initial five weeks of sampling analysis. The most recent report sent to NC DEQ on November 9 identified concentrations of GenX above the highest value of ORD's calibration curve for samples collected at Chemours' NPDES-permitted wastewater outfall and in finished drinking water in Brunswick County. (These high figures, collected on October 16, 18, and 19, are presumed to be the result of the October 6 valve failure and release.)

EPA Region 4's Science and Ecosystem Support Division, located in Athens, GA, is now conducting laboratory analysis of water samples, in lieu of ORD, and released a report on November 21.

EPA Region 4 performed a full TSCA compliance inspection on June 28th and 29th accompanied by OECA's contractor ERG. The inspection sought information regarding engineering changes made by Chemours since 2009, assure worker protection complied with the TSCA section 5(e) Consent Order and review other production processes at this facility for chemicals of concern. A draft of the TSCA inspection report is anticipated the first week of December.

EPA Region 3 performed a full TSCA inspection at the primary use site of GenX at the Chemours Washington Works facility in Parkersburg, WV, on October 17th and 18th. Again the inspection team wanted to assure worker safety and learn about the handling of the GenX chemical substance. There is also ongoing sampling for PFOA near the Washington Works facility with a proposal to sample for GenX.

EPA Region 2 is also interested in the TSCA compliance status for the GenX chemical substance because of the Chemours fluoroproducts facility at Chambers Works in Deepwater, NJ.

State of North Carolina Actions

In addition to setting a drinking water health goal, North Carolina has taken judicial, administrative, and informal actions to address GenX discharges and their effect on human health.

Judicially, on September 7, North Carolina filed a complaint in state court alleging the following violations of state law: (1) violation of groundwater standards; (2) misrepresentation and violation of NPDES permit disclosure requirements; and (3) unpermitted discharges. The action also seeks a temporary restraining order to immediately cease Chemours' discharges of specific additional per- and polyfluoroalkyl substances (PFASs) and to continue to prevent the discharge of GenX. The action further seeks an injunction to eliminate the discharge of all PFASs to surface waters until permitted; remove, treat, or control PFASs that may contaminate groundwater; assess site activities and submit a plan and proposed schedule for corrective action; abate the violations (numbered above) pursuant to a corrective action plan; and comply with ongoing information requests. In its action, North Carolina is not seeking a civil penalty for the alleged violations. On September 8, North Carolina and Chemours entered a partial consent order to address the relief sought via the request for a temporary restraining order, among other agreements.

Administratively, NC DEQ issued a notice on September 5 that it would suspend Chemours' NPDES permit. Ultimately, on October 24, NC DEQ elected not to suspend the company's NPDES permit, pursuant to the initial notice, citing the actions the company had taken in response to the September 8 partial consent order. On November 14, in response to Chemours' failure to report the discharge associated with the October 6 release, NC DEQ issued a notice of violation, including a potential assessment of a \$25,000 penalty for the failure to report the release. Two days later, on November 16, NC DEQ again moved to suspend the company's NPDES permit. The most recent suspension notice takes effect on November 30 and applies to discharges of process wastewater from "the areas where GenX and other fluorinated compounds are produced." The suspension notice also threatens to revoke Chemours' NPDES permit (which would not apply to "process wastewater from Kuraray and Dupont facilities that is treated and discharged by Chemours") after a 60-day public participation period. Finally, NC DEQ noted that the State Bureau of Investigation is looking into potential criminal violations related to the October 6 reporting failure.

Lastly, North Carolina is directing Chemours to provide bottled water to nearby residential well owners whose sampling results show levels of GenX in groundwater above the State's 140 ppt health goal. Chemours and North Carolina have sampled 128 residential wells. In all, the company and the State found levels of GenX above the health goal in 50 samples, some presence of GenX (below the health goal) in 43 samples, and no presence of GenX in 35 samples. Accordingly, Chemours is providing bottled water to the 50 residential well owners whose water samples exceeded the State's health goal for GenX. In total, Chemours plans to sample 450 residential wells within a one-mile radius of the Fayetteville Works Facility. North Carolina has not cited the authority under which it is directing Chemours to provide alternative water; EPA is researching state law to find the relevant authority.

Potential Federal Enforcement Options³ & Anticipated Defenses

Clean Water Act⁴

Ex. 5 AC/AWP/DP

Ex. 5 AC/AWP/DP

⁴ The Cape Fear Public Utility Authority (CFPUA) filed suit against Chemours, alleging tort claims. CFPUA also provided notice of intent to bring citizen suit claims against Chemours and DuPont for violations of the CWA, and the Resource Conservation and Recovery Act (RCRA). CFPUA will evaluate whether to bring its citizen suit claims depending on the diligence exercised by NC DEQ in pursuing its CWA enforcement action. Additionally, at least four private parties have brought class action suits against Chemours, alleging tort claims in response to GenX pollution.

Ex. 5 AC/AWP/DP

Safe Drinking Water Act⁵

Ex. 5 AC/AWP/DP

⁵ EPA has received a petition to exercise its authority under SDWA § 1431 to address the GenX discharges. The petitioner, Civitas Institute, also filed a notice of intent to sue under the CWA on July 28. The petition is dated September 6. The next day, on September 7, North Carolina filed a complaint in state court seeking to immediately eliminate discharges of GenX and specific, recently-identified PFASs. The next day, on September 8, NC and Chemours reached an agreement under which the company would continue to prevent discharges of GenX and immediately cease discharging the PFESAs.

Ex. 5 AC/AWP/DP

Toxic Substances Control Act

Administrative Penalty Action

Ex. 5 AC/AWP/DP

Ex. 5 AC/AWP/DP

TSCA § 11

Ex. 5 AC/AWP/DP

TSCA Imminent Hazards

Ex. 5 AC/AWP/DP

Resource Conservation and Recovery Act

Ex. 5 AC/AWP/DP

Ex. 5 AC/AWP/DP

Next Steps

- Finalize Region 4 TSCA inspection report.
- Finalize Region 3 TSCA inspection report.